

Claims

What is claimed is:

- [c1] A system for monitoring HTTP transactions between a server and a client, comprising:
 - a data collector which runs on the server and collects data from HTTP requests sent by the client to the server and data from HTTP responses sent by the server to the client;
 - a debugging controller which controls an execution mode of the server;
 - a graphical display which displays the collected data and through which replay requests are sent to the server, each replay request specifying a prior HTTP request to be interpreted by the server; and
 - a request player which runs on the server and modifies each replay request with a portion of the collected data associated with the prior HTTP request to be interpreted by the server.
- [c2] The system of claim 1, wherein the execution mode is debugging.
- [c3] The system of claim 2, further comprising:
 - a debugger accessed by the server.
- [c4] The system of claim 1, wherein the execution mode is normal.
- [c5] The system of claim 1, wherein the debugging controller determines the execution mode using information gathered by a graphical user interface (GUI) and an integrated development environment (IDE).
- [c6] The system of claim 1, wherein the request player modifies the replay requests prior to the server interpreting the replay requests.

- [c7] The system of claim 6, wherein the request player comprises a process which uses a hook in the server to intercept the replay requests in order to modify the replay requests.
- [c8] The system of claim 6, wherein the request player comprises a process which uses a hook in a server plug-in to intercept the replay requests in order to modify the replay requests.
- [c9] The system of claim 1, wherein the collected data are stored in a directory on the server.
- [c10] The system of claim 9, further comprising means for retrieving the collected data from the directory and serving the data to the request player and the graphical display.
- [c11] The system of claim 1, further comprising means for re-processing a selected number of HTTP requests in a predetermined sequence.
- [c12] The system of claim 1, wherein an application which provides the graphical display manages the collected data.
- [c13] The system of claim 11, wherein the application is an integrated development environment for a web application.
- [c14] The system of claim 1, wherein the debugging controller runs on the client.
- [c15] The system of claim 1, further comprising means for notifying the graphical display when new data is collected by the data collector.

- [c16] A system for testing and debugging a web application, comprising:
 - a server which hosts the web application;
 - a client which accesses components of the web application by sending HTTP requests to the server and receiving HTTP responses from the server;
 - a data collector which runs on the server and collects data from the HTTP requests and the HTTP responses;
 - a debugging controller which runs on the client and controls an execution mode of the server;
 - a graphical display which displays the collected data and through which replay requests are sent to the server, each replay request specifying a prior HTTP request to be interpreted by the server; and
 - a request player which runs on the server and modifies each replay request with a portion of the collected data associated with the prior HTTP request to be interpreted by the server.
- [c17] The system of claim 16, wherein the execution mode is debugging.
- [c18] The system of claim 17, further comprising:
 - a debugger accessed by the server.
- [c19] The system of claim 16, wherein the execution mode is normal.
- [c20] The system of claim 16, wherein the debugging controller determines the execution mode using information gathered by a graphical user interface (GUI) and an integrated development environment (IDE).

- [c21] The system of claim 16, further comprising:
an application which starts the server in a separate process and through which the graphical display can be accessed.
- [c22] The system of claim 21, wherein the application is an integrated development environment for a web application.
- [c23] The system of claim 22, wherein the client is accessible from within the integrated development environment.
- [c24] The system of claim 21, wherein the application includes an internal server.
- [c25] The system of claim 24, wherein the internal server updates the graphical display with the collected data.
- [c26] A method for testing and debugging a web application, comprising:
sending a requested execution mode to the debugging controller;
determining an execution mode of a server;
comparing the requested execution mode and the execution mode of the server;
switching the execution mode of the server to match the requested execution mode; and
forwarding the HTTP request to the execution server.
- [c27] The method of claim 26, further comprising:
exiting the execution server;
selecting an actuation state of the debugger; and
restarting the execution server.
- [c28] The method of claim 27, wherein the actuation state is on.

- [c29] The method of claim 27, wherein the actuation state is off.
- [c30] A tool for testing and debugging a web application, comprising:
 - means for sending a requested execution mode to the debugging controller;
 - means for determining an execution mode of a server;
 - means for comparing the requested execution mode and the execution mode of the server;
 - means for switching the execution mode of the server to match the requested execution mode; and
 - means for forwarding the HTTP request to the execution server.